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| **Spring Syllabus 2012**  **for Methods & Materials of Mathematics (M3)** |

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| **Date** | **Topics and Activities** | **Readings and Homework Assignments** |
| Class 7  Friday,  January 13  1:30 – 4:30 | **TOPICS:**   * WHAT IS ASSESSMENT IN MATHEMATICS? * LOOKING AT STUDENT WORK IN MATHEMATICS   **ACTIVITIES:**   * Using a holistic rubric to evaluate a set of student work | **READINGS DUE:**   * Stenmark, Mathematics Assessment: A Practical Handbook   **ASSIGNMENTS DUE:** |
| Class 8  Friday,  January 27  1:30 – 4:30 | **TOPICS:**   * ASSESSMENT IN MATHEMATICS * LOOKING AT STUDENT WORK   **ACTIVITIES:**   * Designing a task specific rubric to evaluate a set of student work | **READINGS DUE:**   * Burns, Marilyn, “Using Writing to Assess Understanding” * Burns, “Looking at How Students Reason” * Parker, Ruth, “Assessing Mathematical Understanding” * Van de Walle, Chapter 5   **ASSIGNMENTS DUE:**   * Discuss SLIM project with your mentor teacher. Establish unit topic, teaching dates, concepts/skills that will be covered (unit goals). * Turn in copy of the above to Susie Dorr. |

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| **Date** | **Topics and Activities** | **Readings and Homework Assignments** |
| Class 9  Friday,  February 10  1:30 – 4:30 | **HOMEWORK SHARE: gender observation share**  **TOPICS:**   * **TWO-DIMENSIONAL GEOMETRY**   **ACTIVITIES:**   * Building 3-d models from 2-d drawings, “Guess My rule” with geometric shapes, Favorite fourths with electronic geoboards and dot paper squares, playing with power polygons | **READINGS DUE:**   * **Van de Walle, Chapters 14**   **ASSIGNMENTS DUE:**   * SLIM project abstract for 15-lesson unit, including lesson objectives, brief overview of lesson/activities and type of assessment planned. * Record keeping sheets – How do you plan to record and keep track of all your assessment data on your students? |
| Thursday,  February 16  3:30 – 6:30 | INDIVIDUAL CONFERENCES TO DISCUSS **SLIM** LESSONS | * Individual conferences with Susie to discuss SLIM * Turn in drafts of all student worksheets and assessment instruments * Write 15 lesson plans for SLIM. |
| Friday,  February 24  1:30 – 4:30 | INDIVIDUAL CONFERENCES TO DISCUSS **SLIM** LESSONS | * Individual conferences with Susie to discuss SLIM * Turn in drafts of all student worksheets and assessment instruments * Write 15 lesson plans for SLIM. |

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| **Date** | **Topics and Activities** | **Readings and Homework Assignments** |
| Class 10  Friday,  March 9  1:30 – 4:30 | **TOPICS:**   * FRACTIONS, RATIOS AND PERCENT   **ACTIVITIES:**   * Exploring part-whole, discrete objects & number line models, fraction track game * Playing with fractions blocks and fraction strips   Fraction flags | **READINGS DUE:**   * Van de Walle, Chapters 15 - 17   **ASSIGNMENTS DUE:**   * Observe a mathematics classroom to gather data on gender. How many times do both girls and boys speak? Who raises their hands more often? Is there a difference in the kinds of questions girls & boys ask or the level of cognitive demand of the questions they answer? Who does the teacher call on? How much airtime do boys and girls demand and receive? What strategies does the teacher employ to address equity? * Find quiet moments to survey at least 5 female and 5 male students. Which students say they ‘love’ math? Which students say they’re good at it? Is the response of both sexes the same? * Collect specific data and come prepared to share analysis. Are there observable differences in the mathematics behaviors of girls and boys? Do they approach tasks in the same way? |
| February 20 – March 30 | SLIM DOWN | **ASSIGNMENTS DUE:**   * Implement **SLIM** Project lessons * Write individual lesson reflections * Evaluate student learning * Provide student feedback |

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| **Date** | **Topics and Activities** | **Readings and Homework Assignments** |
| Friday,  April 1 | **Email Susie (**[**susiedorr@yahoo.com**](mailto:susiedorr@yahoo.com)**)) at least 3 poetic phrases that answer the prompt:**  ***Mathematic is…….*** | |
| Class 11  Friday,  April 13  1:30 – 4:30 | **TOPICS:**   * Discussion of Ron Castleman case study   (Leftover from Fraction Class)   * THREE-DIMENSIONAL GEOMETRY   **ACTIVITIES:**   * Playing with geoblocks & perspective drawing * Building with snap cubes * Exploring cubic arrays and nets | **READINGS DUE:**   * Van de Walle, Chapter 21   **ASSIGNMENTS DUE:**   * Keep up to date with lesson reflections; collect copies of student work; take digital photos |
| Class 12  Friday,  May 4  1:30 – 4:30 | **TOPICS:**   * PROBABILITY   **ACTIVITIES:**   * Determining experimental and theoretical probability through games | **READINGS DUE:**   * Van de Walle, Chapters 21   **ASSIGNMENTS DUE:**   * Write comparative analysis of effectiveness of student tasks and assessments * Write conclusion/self-assessment of SLIM Project learning * Complete and assemble **SLIM** project notebook |
| **Let the Unbridled Revelry Begin!** | | |